

## Design:

- FlickrRequestable:
  - This is a Service protocol. Any class that conforms to this protocol can define custom parameters around populating a request (i.e. request headers, url parameters, etc).
- FlickrSearchResult:
  - This is the response object (from the provided API).
  - One enhancement to this Model that I would suggest is to have this object conform to the Decodable protocol. If you were to peek in the FlickrSearchFactory class, I manually parse the response and map it to FlickrSearchResult (this can be done much easily with the use of the Decodable protocol).
- FlickrSearchFactory:
  - This is the model object that is responsible for making API calls, pagination, and performing the search queries. I have also implemented an extremely light weight cache (String:Data dictionary).
  - If you were to take a look at the successCompletionBlock (part of conforming to the FlickrRequestable protocol), you will notice that I am filtering out non “jpg” and “png” types.
- FlickrCollectionViewCell:
  - UICollectionViewCell that has an UIImageView and a Title
- FlickrSearchView:
  - Search View that contains a Search Bar and a CollectionView
- FlickrSearchViewController:
  - The biggest challenge here was to ensure that if we are in the process of fetching Image data on a background thread, but the cell is no longer on the screen and possible reused, you do not need to update the cell with the Image (just cache it instead).
  - 250 ms debounce -> The timer object helps us with the debounce.
- Other Comments / Logic behind decisions:
  - I decided to use a non-storyboard approach because I wanted to show my understanding of constraints and how they work.